Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Restoring Internet Freedom	)	GN Docket No. 17-108

REPLY COMMENTS OF LEVEL 3 COMMUNICATIONS

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I. INTRODUCTION AND SUMMARY

As explained in Level 3's comments, the Commission's explicit assertion of jurisdiction over the Internet traffic exchange practices of the largest consumer ISPs in the *2015 Order*[1] had a dramatic, positive impact on those ISPs' conduct and, consequently, on the Internet more broadly. Prior to that order, some of the biggest consumer ISPs were deliberately congesting their interconnection links with other networks in a game of chicken, harming their own customers as well as their interconnecting partners, betting their interconnecting partners would capitulate and pay unjustifiable access tolls. After the Commission made clear that they might be required to defend this indefensible conduct, these big consumer ISPs became, although not reasonable, somewhat less unreasonable, and Level 3 and others were able to obtain new agreements that provided for significant expansions of interconnection capacity. The Internet ecosystem is much better off today as a result, all to the benefit of the American people.

Other commenters submitted similar evidence and called for the Commission to retain authority over the big consumer ISP's interconnection practices, including Level 3's competition,[2] the public interest community,[3] and, in a filing based on, among other things, the big consumer ISPs' own internal documents, the New York Attorney General.[4]

In these reply comments, Level 3 responds to arguments, primarily by AT&T and NCTA, that the Commission should disclaim its authority over the Internet traffic exchange practices of large consumer ISPs, and a related argument by AT&T that purports to offer a justification for

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1 Protecting and Promoting the Open Internet, GN Docket No. 14-28, Report and Order on Remand, FCC 15-24, 30 FCC Rcd 5601 (2015) (*2015 Order*).

2 *See generally* Comments of Cogent Communications Inc.

3 *See* Comments of the Open Technology Institute at New America at 45-56.

4 *See generally* Comments of People of the State of New York (New York AG Comments).

paid prioritization. As explained herein, those arguments are technically incorrect, empirically unfounded, and theoretically unsound, and the Commission must reject them.

II. OBJECTIONS TO THE COMMISSION'S JURISDICTION OVER LARGE ISPS' INTERCONNECTION PRACTICES ARE MERITLESS

According to AT&T, "there is no need for regulatory oversight" of its and other large consumer ISPs' Internet traffic exchange practices.[5] That is so, AT&T asserts, "because there are many routes into and out of any broadband ISP's network."[6] According to AT&T, no edge provider needs to deal directly with AT&T to reach AT&T's customers: an edge provider can instead purchase service from any number of providers that can themselves, either directly or indirectly, reach AT&T's subscribers. The market for *those* transmission services is of course highly competitive, and AT&T asserts that low prices in that competitive market "limit the rates [AT&T] can charge for direct interconnection."[7]

AT&T's argument is meritless because all paths to AT&T's customers run through AT&T. Although many networks have interconnection relationships with AT&T and thus can deliver traffic to the AT&T network, in each case they do so only with AT&T's agreement. That is, no interconnecting network can deliver a single packet of Internet traffic to AT&T without AT&T permitting it to do so.[8] If AT&T chooses to impose a toll for such traffic, there is no technical obstacle to it doing so—it will be limited only by the degree of its own marketplace leverage over those interconnecting parties. In fact, AT&T concedes as much elsewhere in its

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5 Comments of AT&T Services Inc. at 48 (AT&T Comments).

6 *Id*. at 47. *See also* Comments of USTelecom Association at 20-21 (US Telecom Comments) (making the same point).

7 AT&T Comments at 48.

8 To be sure, AT&T and other large consumer ISPs like it may have agreements that restrain their ability, for a period, to reduce or limit the growth of interconnection capacity. None of those limitations, however, will last forever.

comments.[9] In the case of the largest consumer ISPs, that leverage is so great, and such a danger to the public interest, the Commission has found it necessary to limit it by express conditions in one recent merger,[10] while the government blocked outright another merger that would have resulted in an even larger—and hence more threatening—consumer ISP.[11] Notably, AT&T itself has substantially more subscribers than Time Warner Cable had during the time when, according to the New York Attorney General, Time Warner Cable was intentionally congesting its interconnections with other networks, leveraging its control over access to its millions of subscribers in an attempt to impose tolls.[12]

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9 *See* AT&T Comments at 33; *see also* USTelecom Comments at 19 (acknowledging "[t]he fact that a broadband provider has the only pathway over the 'last mile' to a particular end-user"). AT&T and USTelecom's concession on this point amounts to an admission that the Commission should incorporate into its record and apply the analysis the Commission conducted in the context of the Charter-Time Warner Cable and Comcast-Time Warner Cable merger proceedings, which considered how large consumer ISPs are able to leverage their market position to engage in harmful interconnection practices. *See* Motion of INCOMPAS to Modify Protective Orders, WC Docket No. 17-108 (filed July 17, 2017).

10 *See* Applications of Charter Communications, Inc., Time Warner Cable Inc., and Advance/Newhouse Partnership for Consent to Assign or Transfer Control of Licenses and Authorizations, MB Docket No. 15-149, Memorandum Opinion and Order, FCC 16-59, 31 FCC Rcd 6327 ¶ 131 (2016) (*Charter-TWC Merger Order*); *see also id*. ¶ 95 ("BIAS providers with large numbers of subscribers have greater leverage").

11 *See* U.S. Department of Justice, Comcast Corporation Abandons Proposed Acquisition of Time Warner Cable After Justice Department and the Federal Communications Commission Informed Parties of Concerns, Press Release 15-509, *available at* https://www.justice.gov/opa/pr/comcast-corporation-abandons-proposed-acquisition-time-warner-cable-after-justice-department; *see also* Renata Hesse, Acting Assistant Attorney General, Remarks at 2016 Global Antitrust Enforcement Symposium, *available at* https://www.justice.gov/opa/speech/acting-assistant-attorney-general-renata-hesse-antitrust-division-delivers-opening ("The combination of [Comcast and Time Warner Cable] would have made one firm the provider of internet service to nearly 60% of the households that purchase high-speed broadband internet. That would have substantially increased Comcast's bargaining leverage, and allowed it to charge significantly more to large providers of internet content that wanted to exchange traffic directly with Comcast's network…. So much power could not be entrusted to one company.").

12 *See Charter-TWC Merger Order* ¶ 14 (noting that Time Warner Cable had 11.7 million broadband subscribers at the time of the transaction, which coincides with the time it was

AT&T's assertion that low prices in the transit market constrain its, and other large consumer ISPs', ability to impose tolls is incorrect. Indeed, it is backwards. The market price for transit could only restrain AT&T's ability to impose tolls if those selling transit at that price could satisfy the market's demand and were not themselves dependent on AT&T to do so. But as just discussed, no entity can deliver Internet traffic to AT&T without AT&T's permission. Accordingly, if AT&T imposes a toll on networks that interconnect with it, those networks will not be able to sustainably charge their own customers less to deliver traffic to AT&T than AT&T charges them. Any provider that wishes to not deal directly with AT&T will necessarily exchange traffic with AT&T indirectly through one or more intermediaries, at least one of whom will have to deal directly with AT&T—and have to obtain AT&T's permission, and pay any toll AT&T decides to levy, to exchange traffic with it. In this way, any tolls AT&T and other large ISPs impose will create a price floor for Internet transit service. What's more, there is every indication that the price floor such tolls would create would be quite high: as Level 3 explained in 2014, the large consumer ISPs were even then demanding tolls that equaled or exceeded the price Level 3 was charging for transit service.[13] Accordingly, the historical decline in transit prices, rather than imposing discipline on AT&T and other large consumer ISPs, is threatened by the tolls AT&T evidently wishes to impose for interconnection.

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engaged in the tactics that formed the basis of the New York AG suit); *id.* ¶ 120 (affirming that the record before the Commission confirmed Time Warner Cable had engaged in such tactics); Leichtman Research Group, About 230,000 Added Broadband in 2Q 2017, Press Release, *available at* http://www.leichtmanresearch.com/press/081817release.html (reporting that AT&T has almost 16 million broadband customers).

[13] *See* Comments of Level 3, GN Docket No. 14-28, et al., at 7-8 (filed Mar. 21, 2014).

In a related argument, AT&T posits that it would be a "commercial non-starter" for an ISP to attempt a "degradation by congestion strategy."[14] That is so, AT&T claims, because doing so would require "limiting capacity across all of its peering points for extended periods," which would "radically degrade the provider's Internet access service and threaten its status as a broadband provider."[15] AT&T is mistaken here as well. First, a consumer ISP like AT&T need not limit capacity across all its interconnections; it only needs to ensure that no unpaid interconnection has sufficient excess capacity to take the targeted traffic—a very different thing, with different consequences for the consumer ISPs' customers.[16] Perhaps more fundamentally, though, AT&T's argument fails because, far from being a "commercial non-starter," such a strategy is one that ISPs have an incentive to adopt, have adopted, and have admitted to adopting.[17]

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[14] AT&T Comments at n. 84.

[15] *Id*. (emphasis omitted).

[16] In 2014, Verizon claimed that the majority of Internet traffic destined for its end-user subscribers was paid traffic. *See* Reply Comments of Verizon and Verizon Wireless, GN Docket No. 14-28, et al., at 58 (filed Sept. 15, 2014). A degradation-by-congestion strategy would not affect such traffic, for which the ISP had already succeeded in extracting tolls. In fact, the performance difference between toll-bearing, uncongested connections and the "slow lane" of congested interconnections, to which big consumer ISPs relegate other traffic, is a key component of the consumer ISP's leverage over its interconnecting partners.

[17] *See, e.g*., *Charter-TWC Merger Order* ¶ 120; New York AG Comments at 5-6 (BIAS providers' internal documents, obtained pursuant to New York Attorney General's investigation, "establish for the first time that the long-running interconnection disputes that harmed consumers and edge providers were the result of BIAS providers' deliberate business decisions to use degraded service to consumers to extract payments from backbone and edge providers."); Mark Taylor, Verizon's Accidental Mea Culpa, Level 3 Blog, *available at* https://www.netformation.com/level-3-pov/verizons-accidental-mea-culpa (noting that Verizon, in a recent blog post, "clearly admitted that Verizon is deliberately constraining capacity") (Verizon's Accidental Mea Culpa); Letter from Joseph C. Cavender, Level 3, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28, Attachment at 6 (noting that Verizon was willing to ameliorate the congestion if paid a toll).

AT&T further argues that the Commission, in the *2015 Order*, did not conclude that there was any need for regulatory oversight of interconnection relationships.[18] This, too, is simply wrong. The Commission found that the record in that proceeding "demonstrate[d] that broadband Internet access providers have the ability to use terms of interconnection to disadvantage edge providers and that consumers' ability to respond to unjust or unreasonable broadband provider practices are limited by switching costs."[19] Moreover, the Commission found, when traffic exchange agreements break down—which, the Commission observed, had repeatedly happened[20]—it "risks preventing consumers from reaching the services and applications of their choosing, disrupting the virtuous cycle."[21] For those reasons, the Commission determined that it would address disputes relating to Internet traffic exchange on a case-by-case basis, and, in addition, vowed to "continue to monitor Internet traffic exchange arrangements" and to "ensure that they are not harming or threatening to harm the open nature of the Internet."[22]

AT&T further argues that "interconnection concerns … lack any empirical basis"[23] AT&T is wrong here, as well: concerns about big consumer ISPs' interconnection tactics are rooted not just in basic economic principles but also in repeated instances of anti-consumer conduct by those ISPs that have been documented by parties, independent non-profit

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18 AT&T Comments at 48.

19 *See 2015 Order* ¶ 205.

20 *See id.* ¶ 199.

21 *See id.* ¶ 205.

22 *Id.* Even the OSP white paper relied on by AT&T and NCTA recognizes the need for Commission oversight to prevent abuses, and it specifically notes the danger of providers with control over access to users (*i.e.,* consumer ISPs) leveraging their market position and engaging in anticompetitive conduct, even though that topic was not a focus of the paper. *See* Kende, http://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp32.pdf, at 24, 26.

23 *See* AT&T Comments at 48.

organizations, and the government. Level 3, for its part, had an interconnection dispute with AT&T caused by AT&T's attempt to impose unjustifiable interconnection tolls that lasted for years, during which time customers of both Level 3 and AT&T suffered.[24] The Open Technology Institute at New America, analyzing a study by M-Lab, concluded that interconnection disputes involving large consumer ISPs were impacting the Internet experience for millions of Americans.[25] And the New York Attorney General filed suit against Charter Communications, which had purchased Time Warner Cable, after its investigation uncovered evidence that pre-merger Time Warner Cable intentionally restricted interconnection capacity, harming its own customers, in an attempt to force interconnecting parties to pay tolls.[26]

If, notwithstanding all the evidence that large consumer ISPs have engaged in precisely the kinds of harmful interconnection practices the Commission previously found they had the incentive and ability to engage in, and which the Commission's assertion of jurisdiction was intended to address, the Commission has suddenly become unsure about the degree of need for such regulation, the Commission must, under the Administrative Procedure Act, undertake an investigation into the matter. As the Commission is aware, many interconnection agreements involving the largest consumer ISPs contain non-disclosure provisions that prevent parties from

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[24] *See* Michael Mooney, Chicken, Level 3 Blog, *available at* http://www.netformation.com/level-3-pov/chicken-a-game-played-as-a-child-and-by-some-isps-with-the-internet (noting that Level 3 had written to AT&T about how AT&T's conduct with respect to interconnection was breaking the Internet); Level 3 and AT&T Enter Into Interconnection Agreement, Press Release, *available at* http://news.level3.com/news-archive?item=137034 (announcing a new interconnection agreement on May 11, 2015).

[25] *See* Open Technology Institute, Beyond Frustrated, The Sweeping Consumer Harms as a Result of ISP Disputes, attached to Letter from Sarah J. Morris, Senior Policy Counsel, Open Technology Institute at New America, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28, et al. (filed Nov. 18, 2014).

[26] *See* New York AG Comments at 6-8.

submitting them voluntarily to the Commission without the consent of the other party. For this reason, if the Commission is not convinced by the record in this proceeding to reaffirm its previous findings regarding the need to protect against large consumer ISPs' abusive Internet traffic exchange practices, the Commission must take affirmative steps to obtain evidence on the matter—including interconnection agreements and strategy documents relating to Internet traffic exchange from the largest BIAS providers akin to those obtained by the New York Attorney General—as the Commission cannot rely on a public comment process to reveal such information, including information that commenters are not permitted to disclose.[27] If the Commission does conduct such an investigation, it will conclude that its previous findings were well grounded and beyond reasonable dispute.

NCTA offers its own handful of arguments that the Commission should not retain jurisdiction over large consumer ISP interconnection practices, some similar to AT&T's, all without merit. According to NCTA, "there is simply no policy justification" for the Commission to maintain oversight of big consumer ISPs' interconnection practices "in light of the well-functioning marketplace for interconnection and traffic-exchange" that existed prior to the *2015 Order*.[28] That assertion ignores reality. As Level 3 and others have documented, several of the largest consumer ISPs, in some cases for several years at a time, engaged in harmful interconnection practices that affected tens of millions of Americans.[29] Far from aberrations, the

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[27] *See, e.g.*, *Butte County v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010) (observing that "an agency's refusal to consider evidence bearing on the issue before it constitutes arbitrary agency action").

[28] NCTA Comments at 45.

[29] *See supra* notes 24-26; New York AG Comments at 1 (observing that BIAS providers' practice of using congested interconnections as leverage to attempt to impose tolls "was used for years by at least two of the country's biggest BIAS providers").

Commission has repeatedly concluded that large consumer ISPs have the ability and incentive to engage in precisely such conduct—including, among other things, in a detailed economic analysis of a transaction involving NCTA's own members, which NCTA does not attempt to refute.[30] Indeed, the New York Attorney General filed a lawsuit against Charter, one of NCTA's largest members, after an investigation showed that, prior to its merger with Charter, Time Warner Cable had not only engaged in harmful interconnection practices, but it had also deceived its own customers regarding its conduct, which NCTA likewise overlooks.[31]

NCTA also asserts that "the constantly evolving and technically complicated nature" of interconnection agreements suggests that, rather than observing the market and intervening when the facts warrant, the Commission should throw up its hands and let "market forces" rule.[32] The design of automobiles, airplanes, and nuclear power plants may also be fairly characterized as "constantly evolving and technically complicated," but that does not mean the government has no role to play in protecting the public interest by, for example, ensuring that they are all sufficiently safe. A concern relating to the alleged evolving or complicated nature of interconnection arrangements might have been a reason to hold off on adopting prescriptive rules in the Commission's *2015 Order*, but it would be arbitrary and capricious today to point to such concerns as a justification for forswearing Commission jurisdiction over large consumer ISPs' Internet traffic exchange practices, given the record.

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30 *See* Level 3 Comments at 3-8 (reciting the Commission's findings); *Charter-TWC Merger Order*, Appx. C, Part II (providing a detailed economic analysis of the Charter-Time Warner Cable Merger supporting the Commission's imposition of conditions on the combined company to mitigate the risk that the combined company would engage in various harmful acts, including harmful interconnection practices).

31 *See* New York AG Comments at 6-8, 14 n.35.

32 *See* NCTA Comments at 47.

NCTA further contends that "[r]egulation of such [Internet traffic exchange] relationships is immensely costly and complex."[33] NCTA's argument ignores the fact that the Commission has been "regulat[ing] … such relationships" since the *2015 Order* was adopted, and there is no evidence of any "immense" costs or complexity. To Level 3's knowledge, the Commission has not yet found it necessary to adjudicate a single formal interconnection complaint. Far from being costly and complex, the Commission's only action thus far amounts to a declaration that consumer ISPs would, if a complaint were filed against them, be called upon to defend their conduct as reasonable. And as Level 3 explained in its comments, that alone appears to have been sufficient to cause big consumer ISPs to dramatically alter their conduct.

Moreover, if the Commission, as it should, were to explicitly adopt the guiding principles for an interconnection framework Level 3 proposed in the last Open Internet proceeding,[34] that too would not amount to "costly and complex" regulation. The well-documented problem is that the biggest consumer ISPs' desire to extract access tolls threatens the open Internet and the American public; the solution is to prohibit those ISPs from charging access tolls. To that end, the Commission should explain that in the interconnection context, reasonableness requires at the very least that consumer ISPs must peer with adequate capacity on a settlement-free basis with requesting parties if those requesting parties are willing to exchange traffic in the consumer ISPs' local markets. Under this framework, the consumer ISP could establish a reasonable minimum threshold for the amount of traffic an interconnecting party must have, and the consumer ISP would be entitled to choose where it would interconnect, so long as its choices were reasonable.

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[33] *Id*.

[34] *See* Comments of Level 3 Communications, LLC, GN Docket No. 14-18, at 14-16 (filed July 15, 2014) (Level 3 2014 NPRM Comments).

NCTA raises the further specter that "without perfect knowledge, continued regulation would only create opportunities for more gamesmanship, diminish incentives to efficiently share and minimize costs, and (consequently) increase the price of Internet access to end users, rather than improving on the arrangements a free market produces."[35] NCTA does not, however, explain what any of these claims actually mean or why any of them would be true either in the context of the Commission's existing regulatory framework or under Level 3's proposal, which, to reiterate, provides that the consumer ISP has the ability to determine all of the important details about interconnection but denies them the ability to impose tolls. Regardless of what unspecified horrors NCTA might be imagining or how they might be brought about by common-sense, light-handed regulation such as the Commission has adopted, the fact of the matter is that such regulation has, as Level 3 explained in its comments, reduced gamesmanship by the biggest consumer ISPs who were intentionally congesting their interconnections in an effort to monetize the resulting scarcity of capacity, eliminated the chief threat to continued reductions in Internet transit costs, and improved the Internet experience for tens millions of Americans—all outcomes NCTA opposes but for which the Commission can and should take credit.

III. AT&T'S ARGUMENT FOR PAID PRIORITIZATION IS MERITLESS AND ENDANGERS THE OPEN INTERNET

While these reply comments are focused on the importance of preserving the Commission's authority to oversee the interconnection practices of the big consumer ISPs, Level 3 here responds to AT&T's claim that "'paid prioritization' is the ultimate red herring in the net neutrality debate"; that concerns about consumer ISPs engaging in paid prioritization schemes are "unwarranted" and amount to "baseless fear-mongering"; and that, if such schemes ever were

[35] NCTA Comments at 47.

operationalized, they would "enhance consumer welfare"[36] because that (incorrect) argument is closely related to interconnection issues.

AT&T's premise is that certain applications, such as multiplayer online gaming and videoconferencing, are particularly sensitive to latency and jitter, and that users of those applications would be better off if the ISPs connecting those users (and any servers) could "mark[] the relevant packets for special delivery in the event of congestion at peering points and anywhere else those packets are exchanged between IP networks."[37] According to AT&T, addressing such congestion by simply provisioning enough capacity at those peering and exchange points "makes no sense" because doing so would be "very expensive."[38]

AT&T is wrong. First, AT&T never quantifies what it means when it says that it would be "very expensive" to provide adequate capacity at peering points and other places where packets are exchanged between IP networks, but the fact of the matter is that Level 3 buys such equipment, too, and it is not expensive at all.[39] Moreover, it is indisputable that the cost of such capacity is not relevant for the big consumer ISPs: in 2014, Level 3 publicly announced that it had offered to pay for *all* such interconnection costs, but the big consumer ISPs that were attempting to impose tolls had refused the offer. In other words, even when, far from being "very expensive," it would have been *free*, the big consumer ISPs refused to interconnect with

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[36] AT&T Comments at 38, 46.

[37] *See id*. at 39.

[38] *Id*. at 41-42.

[39] For Level 3, the cost of a 10 Gbps port works out to something less than $5,000—and that is not a recurring charge. Only AT&T has data about how much interconnection capacity it needs to add each year, but there is little chance such costs amount to even a rounding error for AT&T or any other large consumer ISP. *Cf*. Verizon's Accidental Mea Culpa (noting that, at the time written in July 2014, Verizon-Level 3 interconnection capacity in Los Angeles amounted to four 10 Gbps ports).

adequate capacity. The big consumer ISPs' concern was not one of costs at all; rather, their goal was to leverage their inadequate interconnection capacity to extract access tolls.[40] Anti-consumer interconnection tactics, however, are unreasonable and ought to be condemned; they cannot serve as justification for paid prioritization.

The paid prioritization model suggested by AT&T is therefore a solution to a problem that does not exist and appears extremely unlikely to ever exist.[41] On the other hand, such a paid prioritization scheme, if implemented, would give big consumer ISPs a mechanism to evade other network neutrality protections, so that they could collect tolls that would otherwise be prohibited. In other words, if the Commission were to permit paid prioritization schemes, it would create a loophole for the big consumer ISPs to abuse the open Internet, just as a failure to retain authority over interconnection practices would.

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[40] *See, e.g.*, New York AG Comments at 7 (discussing evidence demonstrating BIAS provider's "decision to use congestion to strong-arm backbone providers and edge providers into 'paying [] for access'") (alterations and quotation marks in original).

[41] AT&T does not claim paid prioritization is necessary to address congestion on its own or any other consumer ISP's backbone or metro network. Such a claim would be untenable in any event. For one thing, even during the prior round of public debate about congestion, there was no contention that congestion was occurring anywhere other than at interconnection points—Verizon, in fact, went so far as to publicly claim that its own network was not even close to congested. *See* Verizon's Accidental Mea Culpa. For another, arguing that metro network congestion justifies paid prioritization amounts to arguing that consumer ISPs should be permitted to sell broadband access advertised as achieving certain speeds without designing their networks to be able to actually deliver that performance except in unusual circumstances. That is so because if there is congestion in the metro network, then there is virtually no place traffic could be coming from or going to where it would not be affected by congestion—but that simply means the consumer ISP has designed its network not to be able to deliver the advertised performance level. In other words, the argument presupposes that consumer ISPs are defrauding their customers and that doing so is permissible. Finally in this regard, Level 3 notes that its interconnection policy proposal, which envisions interconnecting providers being entitled to peering with large consumer ISPs only if they are willing to exchange traffic in the consumer ISPs' local markets, addresses even the theoretical possibility of congestion on the consumer ISP's backbone. *See* Level 3 2014 NPRM Comments at 15.

IV. CONCLUSION

The Commission's open Internet policy framework has gone a long way toward solving a very real problem. Prior to the *2015 Order*, many of the largest consumer ISPs were intentionally harming millions of Americans—their own customers—by congesting their interconnections to other networks. They did this not because providing adequate capacity would be expensive or technically challenging, but because they decided that inflicting that harm would be a good way to extract tolls from large, well-known edge providers. It made no difference to the big consumer ISPs that this strategy would raise costs or impede performance for non-profits, startups, government bodies, and others, and the harms they caused to their own customers did not stop them. But for the Commission, all those harms should matter, and the Commission should not abandon the policies that can prevent them.

Respectfully submitted,

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